

ABSTRACT

A LED system (100) for illumination and data transmission employs a LED driver (110), an electronic switch (130), and an illumination unit (150). In a first illumination state, illumination unit (150) receives LED current(s) from LED driver (110) to emit a first light output. In a second illumination state, the illumination unit (150) receives additional LED current(s) from LED driver 110 via the electronic switch as controlled by the LED driver where the illumination unit (150) additionally emits a second light output. LED system (100) optically communicates a data bit with each transition of the illumination unit (150) from the first illumination state to the second illumination state, and vice-versa.